# Merry Christmas from SBARAL

The Monthly Newsletter of the South Bay Amateur Radio Association

## Merry Christmas to all !!! SBARA Christmas

SBARA meeting will be January 14th., 1011. See you then!!

## Party

Hurricane Electric Fremont

Dec 10th - 7:00 - ??

Free Raffle Tickets! Potluck Don't forget your Dish (check your email for details). Show and Tell Night!! Bring your cool Project!!

SBARA's Board of Director and all of the Club's Volunteers including our VE Team for the wonderful task you undertook this year making our Tri-City VE such a great Success!!

On behalf of the Board and all Volunters, SBARA wishes you a Very Merry Christmas and a Happy New Year!!!

The 2010 SBARA Christmas Party is our December event and the next regular



Stan & Cliff have been working all day on installing my clothesline, Mary.

#### DECEMBER 2010 FREMONT, Ca.

VOLUME 10 ISSUE 12



## Christmas 2010



## Merry Christmas



Happy New Year

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## Merry Christmas from SBARA!!

## SBARA's Holiday Potluck & Raffle Details

### SBARA's December Potluck

Our December meeting will take on a different format. We are planning a pot-luck and home brew presentation evening on Friday, December 10<sup>th</sup>. If Hurricane Electric allows us to bring food, we will hold this event at our regu-

lar meeting place. Come and break bread with us, and if you have something to share, you will get a few minutes to demonstrate your latest home brew project. (please provide me with a short written intro when you come to the potluck.

### SBARA's December Raffle

In keeping with the theme of our December meeting, the December raffle will also be pot luck. That's right; the prizes will be provided by you! This is a great time to look through your gear and cull out any items that you don't use but that another Ham might enjoy. For

each item you bring, you will receive one free raffle ticket. There will be one nice "grand" prize (Shhhhh, it's still a secret!) but the rest of the raffle is up to you. The more you bring, the more exciting our December raffle will be! Contact Robin, KI6YTA@arrl.net, if you have any questions

## **SBARA Elections**

### SBARA Elections January!!!!

It's that time of the year again!! Now is your opportunity to help build the direction of SBARA for 2011 and beyond. If you have never run for a position, please consider doing so. You will receive help from the existing officers and board members.

Positions to be elected will be the Four (4) club officer positions. They include; President, Vice President, Secretary, and Treasurer. The Elections will take place in December during our monthly meeting.

Please consider becoming a leader in your Club!!!

## **Tri-City VE News**

These are the dates that the Tri-City VE will offer		<u>Date</u>	<u>Day and Time</u>
Amateur Rad <u>Date</u>	io License tests during 2011.  Day and Time	July 9 August 9 Sept. 10	Saturday 9 a.m. Tuesday 6:30 p.m. Saturday 9 am
January 15 February 8 March 12 April 12 May 14	Saturday 9 a.m. Tuesday 6:30 p.m. Saturday 9 a.m. Tuesday 6:30 p.m. Saturday 9 am	Oct.11 Nov.12 Dec.13	Tuesday 6:30 p.m. Saturday 9 a.m. Tuesday 6:30 p.m.
June 14	Tuesday 6:30 p.m.		

## Merry Christmas from SBARA!!

468: Ham Radio's Magic Number

Here in the U.S.—where we still measure length in feet—468 is a magic number. Why? Well, the formula for calculating the length, in feet, of a half-wave dipole antenna is:

L (ft) = 468 / f (MHz)

If you do the math, a half-wavelength is actually 492/f, so where did the number 468 come from? The explanation most often given these days is that a radio wave travels about 5% slower in wire than it does in free space, so the distance that a radio wave would travel in a wire is about 5% less than it would travel in free space. Now, I don't know about you, but while I've used this formula for building dipoles, I've never had one tune up perfectly using that number. There are a number of reasons for this, the main one being the height above ground of the dipole. What I've found is that the elements of the dipole are usually longer than they need to

I sometimes joke that whoever came up with that number did so that hams wouldn't cut their dipoles too short. After all, it's much easier to make a length of wire shorter than it is to make it longer.

Ward, NOAX, wasn't satisfied with any of the common answers to where the number 468 came from. In the latest issue of QST, he consulted the materials in the ARRL library and found the answer.

The October 1926 issue of QST included an article titled, —The Length of the Hertz Antenna. (—Hertz antennal was the name most commonly used for a dipole in the early days of radio.) The author of that article constructed nine different dipoles and measured their resonant frequencies. He then calculated a value, K, by which you'd multiply the wavelength to get the wire length. If you multiply that number by 300, you'd get values ranging from 423 to 471. The number 468 first appeared in the 1929 ARRL Handbook.

For this article, NOAX did a number of simulations of a 20m dipole at various heights, ranging from 1/8 wavelength to 2 wavelengths. He came up with numbers ranging from 466.4 to 483.4. This is somewhat at odds with my experience, although I must admit that I've never been able to get my dipoles up that high. That's my guess for why my dipoles are almost always shorter than 468/f. At any rate, this article is certainly worth reading.

This article appeared in the September 2010 issue of The Radio Hill Gazette. The Radio Hill Gazette is the official publication of the Schaumburg Amateur Radio Club which can be found at http://n9rjv.org. The author's website can be found at www.kb6nu.com.

#### ANAHEIM. CA

(Near Disneyland) 933 N. Euclid St., 92801 (714) 533-7373 (800) 854-6046 Janet, KL7MF, Mgr. anaheim@hamradio.com

#### **BURBANK, CA**

1525 W. Magnolia Blvd, 91506 (818) 842-1786 **(800) 854-6046** Magnolia between S. Victory & Buena Vista burbank@hamradio.com

### OAKLAND, CA

2210 Livingston St., 94606 (510) 534-5757 Mark, WI7YN, Mgr I-880 at 23rd Ave. ramp oakland@hamradio.com

#### SAN DIEGO, CA

5375 Kearny Villa Rd., 92123 (858) 560-4900 (800) 854-6046 Jose, XE2SJB, Mgr. Hwy. 163 & Claremont Mesa sandiego@hamradio.com

## SUNNYVALE, CA

510 Lawrence Exp. #102, 94085 (408) 736-9496 (800) 854-6046 Jon, K6WV, Mgr. So. from Hwy. 101 sunnyvale@hamradio.com

#### **NEW CASTLE. DE**

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#### PORTLAND, OR

11705 S.W. Pacific Hwy. 97223 (503) 598-0555 (800) 854-6046 Leon, W7AD, Mgr. Tigard-99W exit from Hwy. 5 & 217 portland@hamradio.com

#### **DENVER, CO**

8400 E. Iliff Ave. #9, 80231 (303) 745-7373 (800) 444-9476 John, WØIG, Mgr. denver@hamradio.com

#### **NEW LOCATION!**

#### PHOENIX, AZ

ve 85029 phoenix@hamradio.com

#### ATLANTA, GA

6071 Buford Hwy., 30340 (770) 263-0700 (800) 444-7927 Mark, KJ4VO, Mgr. Doraville, 1 mi. no. of I-285 atlanta@hamradio.com

#### **WOODBRIDGE, VA**

(Near Washington D.C.) 14803 Build America Dr. 22191 (703) 643-1063 (800) 444-4799 Steve, W4SHG, Mgr. Exit 161, I-95, So. to US 1 woodbridge@hamradio.com

#### SALEM, NH

(Near Boston) 224 N. Broadway, 03079 (603) 898-3750 (800) 444-0047 Chuck, N1UC, Mgr. Exit 1, I-93; 28 mi. No. of Boston

salem@hamradio.com





#### TS-2000 HF/VHF/UHF TCVR

- 100W HF, 6M, 2M 50W 70CM
- 10W 1.2 GHz w/opt UT-20 module
   Built-in TNC, DX packet cluster

#### **Call Now For Special Price!**



#### TH-F6A

2M/220/440

- · Dual Chanel Receive
- 1.1 1300 mHz (cell blocked) Rx
   FM, AM, SSB
   5w 2M/220/440 TX, FM
- 435 Memories
- Li-Ion Battery

#### **Call For Low Price!**



#### TM-D710A 2M/440 Dualband

- 50w 2M & UHF
- Optional Voice synthesizer

- . Echolink @ Ready w/ 10 memories Built-in TNC • Sky Command II+
- GPS I/O Port
- Choice of Green/Amber LCD backlight

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oakland@hamradio.com

#### SUNNYVALE, CA

510 Lawrence Exp. #102, 94085 (408) 736-9496 (800) 854-6046 Jon, K6WV, Mgr. So. from Hwy. 101 sunnyvale@hamradio.com





#### IC-7000 HF/VHF Transceiver

- 160-10M/6M/2M/70cm
- 2x DSP
- Digital IF filters Digital Voice recorder
- 2.5 inch TFT display

#### Low Pricing!



#### **DJ-G7T** 2m/440/1.2 Triband HT

- Full duplex any two bands
   Internal VOX
   CTCSS/DCS + Tone scan built-in
- Hi-capacity Li-lon battery
   1000 Memories

Low Pricing!



#### IC-7600 All mode Transceiver

- 100W HF/6M transceiver, Gen cov. Receiver
- Dual DSP 32 bit
   Three Roofing filters- 3,6,15khz
   5.8 inch WQVGA display
- . Hi-res real time spectrum scope
- The Ultimate Radio!



#### DR-135TP 2M mobile

- 50 Watt out Alpha numeric display
   100 mems Built-in TNC 1200 & 9600 Baud
   Front Panel GPS in Rear DB-9 port
   CTCSS/DCS Encode/Decode built in

Low Pricing!

## **COAST TO COAST FREE SHIPPING** UPS - Most Items Over \$100 VX-8R



## YAESU





- 100w HF/6M, 50w 2M, 20w UHF
- 200 mems Detachable front panel (YSK-857 required)

**Call for Low Price!** 



#### FT-2000 HF + 6M tcvr

- 100 W w/ auto tuner built-in Power supply
- . DSP filters / Voice memory recorder
- 3 Band Parametric Mic EQ 3 IF roofing filters
- Call Now For Low Pricing!

wide band Rx

## ristmas from SBA

**South Bay Amateur** Radio **Association** Founded 1974 **Mailing Address** Box 8401 Fremont, Ca. 94537-8401 Web Site — www.sbara.org

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Vice President

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**Photographer** 

### **Local Repeater & Net Information**

WA6PWW -147.015 +600Khz, PL 103.5

WA6PWW -223.900 -500Khz, PL 107.2

442.600 +5Mhz, PL 107.2 WA6PWW -

K6AIR -146.940 -600Khz, PL 123.0

K6AIR -441.525 +5Mhz, PL 123.0

ARES -Tuesday @ 7:30pm -

147.015 + PL 103.5

## **SBARA Meeting Location**

Our meeting location is at Hurricane Electric.

The address in Fremont is:

760 Mission Court — Come to the meeting.

Bring your HF transceiver, antenna) or HT!

Talk-In 147.015Mhz. +600

Also consider joining us at Wok City Diner for Dinner at 6PM

Mingle with your fellow SBARA members !!

The **South Bay Amateur** Radio Association is a general interest amateur radio club serving the Fremont Tri-City area. The club service events. If you have has been in existence since 1974, and has functioned continuously ever since. We are an ARRL Special Service Club, a California not-forprofit tax exempt organization as specified in IRS Stat-

utes. We sponsor training for new hams, license examination sessions, and participate in various public a specialized amateur radio interest, chances are you can share it with one or more of our club members.

SBARA meets on the 2nd Friday of every month at Hurricane Electric in Fremont, California. The meeting begins at 7:30 PM. After conducting business, coffee and snacks are served while we socialize. Following the break, a program of interest will be presented. All persons interested in amateur radio are invited to attend. Families are welcome. We hope to see you there!

## Merry Christmas from SBARA!!







## Club Announcements

SBARA's December meeting is the 10th @ 7:00PM.....Christmas Potluck and Raffle.

Our meeting location is at:

Hurricane Electric, 60 Mission Court Fremont, Ca.

Come to the meeting and bring your; Go Pack, HF
Rig, HT, and Antennas!!

Talk-In 147.015Mhz. +600

Great Holiday fun for all.....

The Ground Plane — KU6S http://www.sbara.org South Bay Amateur Radio Association — SBARA P.O. Box 8401 Fremont, Ca. 94537-8401